ZINCHENKO, Nikolay Semenovich; KALININ, V.I., prof., retsenzent; TARANENKO, V.P., dotsent, retsenzent; SHESTOPALOV, V.P., dotsent, retsenzent; CHERNYAYEV, L.K., kand.tekhn.nauk, otv.red.; TRET'YAKOVA, A.N., red.; CHERNYSHENKO, Ya.T., tekhn.red.

[Course of lectures on electron optics] Kurs lektsii po elektronnoi optike. Khar'kov, Izd-vo Khar'kovskogo gos.univ., 1958. 274 p.
(Electron optics) (MIRA 12:3)

BALTAGA, Vsevolod Konstantinovich; KADETS, M.I., kand.fiz.-matem.nauk, otv.red.; TRET'YAKOVA, A.N., red.; TROFIMENKO, A.S., tekhn.red.

[Complex numbers] Kompleksnye chisla. Khar'kov, Izd-vo Khar'kovskogo gos.univ. im. A.M.Gor'kogo, 1959. 103 p.
(Numbers, Complex) (MIRA 13:5)

TRETYAKOVA, A. N.

POGORELOV, Aleksey Vasil'yevich; BLANK, Ya.P., prof., otv.red.; TRET'YAKOVA, A.N., red.; TROFIMENKO, A.S., tekhn.red.

[Infinitely small deformations of general convex surfaces] Beskonechno malye izgibaniia obshchikh vypuklykh poverkhnostei. Khar'kov, Izd-vo Khar'kovskogo Gos.univ. im. A.M.Gor'kogo, 1959. 105 p. (MIRA 13:2)

(Convex surfaces)

KOSTYUK, D.I.; GOLDAYEVA, O.I.; YAKOVLEV, Yu.V.; TRET'YAKOVA, A.N., red.; TROFIMENKO, A.S., tekhred.

[Manual for project work for course credit on the theory of mechanisms and machines] Rukovodstvo k kursovomu proektirovaniiu po teorii mekhanizmov i mashin. Khar'kov, Izd-vo Khar'kovskogo ordena Trudovogo krasnogo znameni gos.univ. im. A.M.Gor'kogo, 1959. 252 p. (MIRA 12:12)
(Mechanical engineering--Handbooks, manuals, etc.)

KOVALEV, Pavel Vasil'yevich; REMIZOV, I.N., dotsent, kand.geologo-mineralog. nauk, otv. red.; TRET'YAKOVA, A.N., red.; LAVRINENKO, S.P.,tekhn.red.

[Geomorphological studies in the Central Caucasus (Baksan Basin)] Geomorfologicheskie issledovaniia v TSentral'nom Kavkaze (bassein R. Baksan). Khar'kov, Izd-vo Khar'kovskogo gos. univ. im. A.M. Gor'kogo, 1957. 159 p. (MIRA 12:1)
(Baksan Valley--Geology, Structural)

MANZHALOVSKIY, Vladimir Pavlovich; GESTRIN, T.N., kand.fiz.-matem. nauk, otv.red.; TRET'YAKOVA, A.N., red.; CHERNYSHENKO, Ya.T., tekhn.red.

[Integration of some homogeneous linear differential equations of the second order with variable coefficients in special functions] K integrirovaniiu nekotorykh odnorodnykh lineinykh differentsial'nykh uravnenii vtorogo poriadka s peremennymi koeffitsientami v spetsial'nykh funktsiiakh. Khar'kov, Izd-vo Khar'kovskogo gos.univ. im. A.M.Gor'kogo, 1959. 68 p. (MIRA 12:9)
(Differential equations, Linear)

MALISHEVSKIY, Nikolay Georgiyevich, prof., doktor tekhn.nauk; SINYAVSKIY, N.N., kand.tekhn.nauk, otv.red.; TRET'YAKOVA, A.N., red.; TROFIMENKO, A.S., tekhred.

[Water intakes from open bodies of water] Vodopriemniki iz otkrytykh vodoemov. Khar'kov, Izd-vo Khar'kovskogo gos.univ. im. A.M.Gor'kogo, 1958. 141 p. (MIRA 12:8)
(Water-supply engineering)

MAYYER, Ya.M., prof., obshchiy red.; TRET'YAKOVA, A.N., red.

[New diesel engines for tractors and combines; a collection of articles] Novye traktornye i kombainovye dizeli; sbornik statei. Pod obshchei red. IA.M.Maiera. Khar'kov, Izd-vo Khar'kovskogo gos.univ., 1958. 187 p. (MIRA 12:7)

1. Kharkov. Politekhnicheskiy institut.
(Diesel engines)

ALEKSEYEV, Yuriy Nikolayevich; SHARAPIN, Ye.F., otv. red.; TRET'YAKOVA, A.N., red.

[Problems in plastic flow of metals] Voprosy plasticheskogo techeniia metallov. Khar'kov, Izd-vo Khar'kovskogo gos. univ. im. A.M. Gor'kogo, 1958. 187 p. (MIRA 11:12)
(Metalwork) (Rheology)

IZMAYLOV, N.A., prof., zasluzhennyy deyatel' nauki, otv.red.; KRAVCHENKO, A.N., red.; OVCHARENKO, N.N., kand.khim.nauk, red.; DUBINSKIY, G.P., dotsent, red.; KOVALEV, P.V., dotsent, red.; TRET'YAKOVA, A.N., red.; POGOZHEV, P.P., tekhn.red.

[In the open spaces of the wonderful motherland; collection from the Departments of Physical Education and Sports, and General Physical Geography of Kharkov University and the Kharkov Mountaineering Section] Na prostorakh rodiny chudesnoi; sbornik kafedry fizicheskogo vospitaniia i sporta i obshchei fizicheskoi geografii Khar'kovskogo ordena Trudovogo Krasnogo Znameni gosudarstvennogo universiteta imeni A.M.Gor'kogo, khar'kovskoi gorodskoi sektsii al'pinizma. Khar'kov, Izd-vo Khar'kovskogo gos.univ., 1959. 397 p. (MIRA 13:12)
(Mountaineering) (Tourism) (Physical geography)

L 27422-66 EWT(1) SCTB DD

ACC NR: AP6017698 SOURCE CODE: UR/0220/65/034/003/0491/0496

AUTHOR: Tret'yakova, A. N.

ORG: Kirov Agricultural Institute (Kirovskiy sel'skokhozyaystvennyy institut)

TITLE: Comparison of nitrogen-fixing blue-green algae isolated from various USSR soils

SOURCE: AN SSSR. Mikrobiologiya, v. 34, no. 3, 1965, 491-496

TOPIC TAGS: algae, plant growth, microbiology

ABSTRACT: Some strains of Stratonostoc linckia f. muscorum isolated from various soil climatic zones of the Soviet Union differ in morphological features, growth rate, and nitrogen fixation. The most active are the strains isolated from Chernozem, Light Chestnut, and Sod-Podzolic soils. The more substantial accumulation of nitrogen in cultures of these strains is due to their rather rapid growth and significant biomass accumulation. The strains of this species possess approximately the same capacity for fixation of atmospheric nitrogen per unit of biomass.

Another species of blue-green nitrogen-fixing algae, Tolypothrix tenuis, is less plastic. The differences between the three strains of this species in cell morphology, growth rate, and nitrogen fixation vary within narrow limits. The morphological characteristics of all the strains under study are related to the composition of the medium. This should be taken into account when identifying algae in cultures. Orig. art. has: 6 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: 04Sep64 / ORIG REF: 009 / OTH REF: 008

Card 1/1 UDC: 582.232-15:631.46

TKACHENKO, Viktor Andreyevich; DOBROVOL'SKIY, V.A., prof., doktor tekhn. nauk, retsenzent; D'YACHENKO, S.K., dots., kand. tekhn. nauk, retsenzent; KOSTYUK, D.I., kand. tekhn. nauk, otv. red.; TRET'YAKOVA, A.M., red.; KOGAN, Ye.M., tekhn. red.

[Designing multisatellite planetary transmissions] Proektirovanie mnogosatellitnykh planetarnykh peredach. Khar'kov, Izd-vo Khar'kovskogo gos.univ. im. A.M.Gor'kogo, 1961. 181 p. (MIRA 15:8)
(Gearing)

MAYMIN, Semen Rafailovich; POLTAVA, Leonid Ivanovich; GOKHFEL'D, M.V., dots., otv. red.; TRET'YAKOVA, AN., red.; SEMASHKO, Yu.Yu., tekhn. red.

[Electric substations and networks on mine surfaces] Podstantsii i seti na poverkhnosti rudnikov. Khar'kov, Izd-vo Khar'kovskogo univ. 1961. 255 p. (MIRA 16:7)
(Electricity in mining)
(Electric power distribution)

LOGVINENKO, A.T.; URYVAYEVA, G.D.; TRET'YAKOVA, A.S.

Hardening of magnesia cement. Izv.Zib.otd.AN SSSR no.4:77-82 '59. (MIRA 12:10)

1. Zapadno-Sibirskiy filial Akademii nauk SSSR.
(Cement)

LOGVINENKO, A.T., kand. ; URYVAYEVA, G.D., kand. tekhn. nauk; TRET'YAKOVA, A.S., mlad. nauchnyy sotr.; SAVINKINA, M.A., mlad. nauchnyy sotr.; BEYROM, S.G., kand. geologo-mineral. nauk; KOLOBKOV, M.N., kand. ekon. nauk; ZABOLOTSKIY, T.V., kand. khim. nauk, otv. red.; NAZARYACHTS, T.M., red.; ZVOLINSKIY, S.A., tekhn. red.

[Gypsum and marls of the Kulunda Steppe] Gipsy i mergeli Kulundinskoi stepi. Novosibirsk, Izd-vo Sibirskogo otdeleniia Akad. nauk SSSR, 1961. 106 p. (MIRA 14:10)
(Kulunda Steppe—Gypsum) (Marl)

TRET YAKOVA, B.M.

TITOVA, A.I.; GRACHEVA, Ye.I.; TRET'YAKOVA, B.M.; MECHKOVSKAYA, M.P.

Reducing morbidity and mortality among children in the Pediatric Clinical Hospital and throughout Kirov District in Yaroslavl'. Vop.okh.mat. i det. 3 no.3:81-84 My-Je '58. (MIRA 11:5)
(YAROSLAVL'--CHILDREN--DISEASES)

GRIGOROV, N.L.; TRETYAKOVA, C.A.; SHESTOPEROV, V.J.; BABAYAN, C.P.; BOYADSYAN, N.G.; MASSALSKI, J.; NIZIOL.B.; OLES,A.

Integral spectrum of nuclear active particles at mountain altitudes from the investigation of high ionization pulses. Acta physica Pol 24 no.3:357-371 S'63.

1. Institute of Nuclear Physics, University, Moscow (for Grigorov, Tretyakova, Shestoperov). 2. Institute of Nuclear Physics, Armenian Academy of Sciences, Yrevan (for Babayan, Boyadsyan). 3. Institute of Nuclear Research, Laboratory of High Energy Physics, Krakow, and II Department of Physics, Academy of Mining and Metallurgy, Krakow (for Massalski, Niziol and Oles).

BABAYAN, Kh.P.; BRYADZHYAN, N.G.; MAMIDZHANYAN, E.A.; GRIGOROV, N.L.; TRET'YAKOVA, Ch.A.; SHESTOPEROV, V.Ya.

Nuclear-active particles in young air showers. Zhur. eksper. i teor. fiz. 46 no.1:110-122 Ja'64. (MIRA 17:2)

1. Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta i Institut fiziki Gosudarstvennogo komiteta po ispol'zovaniyu atomnoy energii SSSR, Yerevan.

..., Kh. P.; GRIGOREV, N. L.; MAMIDZHANYAN, E. A.; SHESTOPEROV, V. Ya.
...OVA, Ch. A.

Report submitted for the 8th Intl. Conf. on Cosmic Rays (IUPAP), Jaipur, India, 2-14 Dec 1963.

BABAYAN, Kh. P.; BOYADZHYAN, N.G.; GRIGOROV, N.L.; MAMIDZHANYAN, E.A.; TRET'YAKOVA, Ch.A.; SHESTOPEROV, V.Ya.

Energy spectrum of nuclear-active particles in extensive air showers. Zhur. eksp. i teor. fiz. 45 no.3:418-427 S '63. (MIRA 16:10)

1. Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta i Fizicheskiy institut Akademii nauk Armyanskoy SSR.
(Cosmic rays)

TRET'YAKOVA, Ch. A.

3.2410 (2205, 1705, 1805)

37539
S/048/62/026/005/002/022
B102/B104

AUTHORS: Babayan, Kh. P., Babetski, Ya. S., Boyadzhyan, N. G., Buya, Z. A., Grigorov, N. L., Loskevich, Ye. S., Mamidzhanyan, E. A., Massal'skiy, Ye. I., Oles', A. A., Tret'yakova, Ch. A., and Shestoperov, V. Ya.

TITLE: Investigation of the interaction of high-energy particles with atomic nuclei on mountains

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 26, no. 5, 1962, 558 - 571

TEXT: Ionization bursts caused by the electron-photon component of a shower of cosmic-ray particles were studied with an array of ionization chambers (Fig. 1) at the mountain station (3200 m) of the Akademiya nauk Armyanskoy SSR (Academy of Sciences Armyanskaya SSR). The array consisted of six rows of ionization chambers separated by layers of lead and graphite, and covered an area of 10 m^2. Owing to this large area, heavy bursts with a total energy of locally generated π^0 mesons amounting to $\sim 10^{13}$ ev could be photographed. The data obtained were analyzed for

Card 1/4

Investigation of the...

ionization bursts in the filter of the arrangement, for the altitude dependence of the burst frequency, and for the burst spectrum and its dependence on the size of the arrangement; the mechanism of local π^0 generation by single nuclear-active particles was investigated. The bursts observed were grouped according to their intensity I, i.e., according to the number of relativistic particles involved; for each group, the numbers of ionization and "structuralized" bursts were determined for rows I-IV. The spectrum of ionization bursts can be described by $N(>I) = AI^{-\gamma}$ for all chambers. The index of the integral spectrum for $2 \cdot 10^3 \leq I \leq 2 \cdot 10^5$ equals 1.37 ± 0.02. With an area of ~ 0.6 m^2 it was found that $\sim 20\%$ of the bursts were "structuralized" for $1 \cdot 10^3 \leq I \leq 5 \cdot 10^3$. At $I > 1 \cdot 10^4$ and 10 m^2 50% of the bursts (at sea level) and 75% (on the mountains) have a structure. An analysis of the course of the bursts with the altitude has shown that: (1) the integral spectrum of muon-induced bursts with $3 \cdot 10^3 - 3 \cdot 10^4$ particles has an exponent of $\gamma = 2.22 \pm 0.14$; (2) for a burst of equal intensity, induced by a single nuclear-active particle, $\gamma = 1.98 \pm 0.09$; (3) at 3200 m, the muon contribution to single heavy bursts is small (15% of all bursts with $\sim 10^3$ particles, and $\sim 4\%$ of those with $\sim 2 \cdot 10^4$ particles;

Card 2/6

Investigation of the...

(4) at sea level, the muon contribution is ~70% (~10^3 particles) and ~50% (~$2 \cdot 10^4$ particles). The burst spectrum was found to depend greatly on the area of the measuring arrangement. With $2 \cdot 10^3$ - $2 \cdot 10^5$ particles, γ goes over from 1.37 ± 0.02 for $(330\ cm)^2$ to 1.99 ± 0.05 for $10 \cdot 330\ cm^2$. The spectrum of bursts with a π^0 energy transfer of $3 \cdot 10^{11}$ - 10^{13} ev agrees with that of nuclear-active particles, and exhibits no "breaks". When particles with $E > 10^{12}$ ev interact with light nuclei in about 10% of the events, the interaction is completely inelastic, and the π^0 energy transfer amounts to 60 - 80% of the primary-particle energy. Such interactions obviously play a significant role in the formation of extensive air showers with at least 10^4 - 10^5 particles. There are 8 figures and 7 tables.

Card 3/4

BABAYAN, Kh.P.; BOYADZHYAN, N.G.; GRIGOROV, N.L.; MAMIDZHANYAN, E.A.; TRET'YAKOVA, Ch.A.; SHESTOPEROV, V.Ya.

Study of "young" high-energy electron-photon air showers. Zhur. eksp. i teor. fiz. 46 no.5:1525-1539 My '64.
(MIRA 17:6)

1. Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta i Institut fiziki Gosudarstvennogo komiteta po ispol'zovaniyu atomnoy energii SSSR, Yerevan.

BABAYAN, Kh.P.; BOYADZHYAN, N.G.; GRIGOROV, N.L.; TRET'YAKOVA, Ch.A.; SHESTOPEROV, V.Ya.

Large ionization bursts and the spectrum of nuclear-active particles at mountain heights. Zhur. eksp. i teor. fiz. 44 no.1:22-34 Ja '63. (MIRA 16:5)

1. Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta.

(Ionization chambers) (Cosmic rays)

GRIGOROV, N.L.; TRETYAKOVA, C.A.; SHESTOPIEROV, V.J.; BABAYAN, C.P.; BAYADSYAN, N.G.; BUJA, Z.; LOSKIEWICZ, J.; MASSALSKI, J.; OLES, A.

Integral spectrum of ionization pulses caused by nuclear active particles of cosmic radiation at mountain altitudes. Nukleonika 7 no.2:61-73 '62.

1. Institute of Nuclear Physics, University of Moscow (for Grigorov, Tretyakova and Shestopierov). 2. Institute of Nuclear Physics, Armenian Academy of Sciences, Erevan (for Babayan and Bayadsyan). 3. Institute of Nuclear Research, Polish Academy of Sciences, Cracow and Department of Physics II, Academy of Mining and Metallurgy, Cracow (for Buja, Loskiewicz, Massalski and Oles.)

GRIGOROV, N.L.; TRETYAKOVA, C.A.; SHESTOPIEROV, V.Y.; BABAYAN, C.P.; BAYADSYAN, N.G.; BABECKI, J.; LOSKIEWICZ, J.; MASSALSKI, J.; OLES, A.

Investigations of energy particles interactions with atomic nuclei at the mountain altitudes. Nukleonika 7 no.12: 759-767 '62.

1. Institute of Nuclear Physics, University of Moscow, Moscow (for Grigorov, Tretyakova, Shestopierov). 2. Armenian Academy of Sciences, Institute of Nuclear Physics, Erevan (for Babayan and Bayadsyn). 3. Institute of Nuclear Research, Laboratory of High Energy Physics, Krakow, Polish Academy of Sciences (for Babecki, Loskiewicz, Massalski, Oles).

BABAYAN, Kh.P.; BABETSKI, Ya.S.; BOYADZHYAN, N.G.; BUYA, Z.A.; GRIGOROV, N.L.; LOSKEVICH, Ye.S.; MAMIDZHANYAN, E.A.; MASSAL'SKIY, Ye.I.; OLES', A.A.; TRET'YAKOVA, Ch.A.; SHESTOPEROV, V.Ya.

Study of interactions of high energy particles with atomic nuclei at mountain altitudes. Izv.AN SSSR.Ser.fiz. 26 no.5: 558-571 Ap '62. (MIRA 15:5)
(Cosmic rays) (Nuclear reactions)

ACCESSION NR: AP4037561 S/0056/64/046/005/1525/1539

AUTHORS: Babayan, Kh. P.; Boyadzhyan, N. G.; Grigorov, N. L.; Mamidzhanyan, E. A.; Tret'yakova, Ch. A.; Shestoperov, V. Ya.

TITLE: Study of "young" electron photon air showers of high energy

SOURCE: Zh. eksper. i teor. fiz., v. 46, no. 5, 1964, 1525-1539

TOPIC TAGS: young air shower, electron photon air shower, particle energy distribution, air shower absolute intensity, primary particle energy, absorption range, inelasticity coefficient

ABSTRACT: To ascertain whether the large momentum transfer to neutral pions, occurring when nuclear-active particles interact with lead, occurs also when these particles interact with light nuclei, an investigation was made of the characteristics of the electron-photon component of "young" air showers with energy $E \geq 1.7 \times 10^{12}$ eV. Young showers are defined as those in which the electron-photon

Card 1/3

ACCESSION NR: AP4037561

component of high energy is generated not far above the measuring apparatus. The measurements were made at 3200 meters above sea level, and the young air showers were found to have an energy distribution of the form

$$N(\geq E) = A(10^{12}/E)^{\gamma},$$

with

$$A = (3.0 \pm 0.2) \times 10^{-9}\ cm^{-2}\ sec^{-1};\ \gamma = 1.69 \pm 0.08$$

for showers in which more than 60% of the energy is concentrated in a circle of radius 70 cm, and

$$A = (1.20 \pm 0.11) \times 10^{-9}\ cm^{-2}\ sec^{-1};\ \gamma = 1.87 \pm 0.17$$

for showers in which more than 60% of the energy is concentrated in a circle of radius 30 cm. Neither of the form of the spectrum nor the absolute intensity agree with the assumption that young air showers are produced in interactions between the nuclear-active high-

ACCESSION NR: AP4037561

energy particles and the air atoms. The energy spectrum and the absolute intensity of the young air showers can be explained by assuming that they are generated in interactions in which the electron-photon component of the shower receives 60--70% of the energy of the generating particle and the effective multiplicity of the γ quanta which carry away this energy is low. The probability of such interactions is less than 0.25. The absorption range of the nuclear component was found to be 109 ± 8 g/cm^2, corresponding to an average inelasticity coefficient 0.5, if the interaction range is 80 g/cm^2 or 0.6 if the interaction range is 90 g/cm^2. Orig. art. has: 4 figures, 9 formulas, and 3 tables.

ASSOCIATION: Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta (Nuclear Physics Institute, Moscow State University); Institut fiziki GKAE, Yerevan (Institute of Physics GKAE)

SUBMITTED: 15Jul63 DATE ACQ: 09Jun64 ENCL: 00

SUB CODE: GP, NP NR REF SOV: 009 OTHER: 001

Card 1 3/3

L 4464-66 EWT(l)/EWT(m)/FCC/T/EWA(m)-2/EWA(h) GW

ACC NR: AP5024624 SOURCE CODE: UR/0048/65/029/009/1648/1651

AUTHOR: Babayan, Kh. P.; Grigorov, N.L.; Tret'yakova, Ch.A.; Shestoperov, V.Ya.

ORG: Institute of Nuclear Physics, Moscow State University im. M.V.Lomonosov (Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta)

TITLE: Characteristics of interactions that give rise to large ionization bursts /Report, All-Union Conference on Cosmic Ray Physics held at Apatity 24-31 August 1964/

SOURCE: AN SSSR. Izvestiya, Seriya fizicheskaya, v. 29, no. 9, 1965, 1648-1651

TOPIC TAGS: primary cosmic ray, secondary cosmic ray, nucleon interaction, inelastic interaction, pion, ionization chamber, ionization hodoscope, nuclear emulsion

ABSTRACT: The authors and collaborators have previously investigated the nuclear interactions that give rise to large ionization bursts (I.e. AN SSSR Ser. fiz., 26, 558, 1962; Zh. eksperim. i teor. fiz., 37, 1147, 1959; ibid., 46 110, 1964; Ibid., 47, 379, 1964; International Conference on Cosmic Rays, Jaipur, Proceedings, 5, 51, 1963) and have found that these interactions are characterized by large inelasticities and the transfer of a large fraction of the primary energy to neutral pions. In the present paper they report results of a continuation of these investigations. Two experimental techniques were employed; the ionization calorimeter technique, and the authors' method of controlled nuclear emulsions (described in some of the references cited above).

Card 1/2

L 4464-66

ACC NR: AP5024624

In the calorimeter measurements, two trays of ionization chambers under 3 and 4 cm of lead served to record the electron-photon component accompanying the nuclear active particle. The nuclear interaction took place in a 60 g/cm^2 slab of graphite, and the energy of the neutral pions produced was determined by two trays of chambers under 3 and 5 cm of lead. Beneath this assembly was an ionization calorimeter consisting of 8 trays of ionization chambers separated by 10 cm thick iron slabs, which served to determine the energy retained by the primary or transferred to charged pions. A total of 676 bursts of energy greater than 1.4×10^{11} eV were recorded at an altitude of 3200 m above sea level. The fraction K_0 of the primary energy transferred to neutral pions was very broadly distributed; the average value of K_0 was 0.58 and K_0 was greater than 0.7 in 43 % of the events. The large fluctuations of K_0 must be taken into account when data involving large bursts are interpreted. Twelve showers in which the energy transferred to neutral pions exceeded 2×10^{12} eV were investigated with the controlled nuclear emulsion technique. In 70 % of these events the total inelasticity was close to unity and the neutral pions received 70 to 80 % of the primary energy. Only four neutral pions were produced on the average per event, and the single most energetic neutral pion received 40 to 50 % of the primary energy. In conclusion, we express our gratitude to the staff of the Krakow Institute of Nuclear Research for making their results available to us. Orig. art. has: 3 figures and 1 table.

SUB CODE: NP/ SUBM DATE: 00/ ORIG REF: 004/ OTH REF: 001

Card 2/2

TRET'YAKOVA, Ch.A.; SHESTOPEROV, V.Ya.

Calculation of fluctuations of the lateral distribution of large atmospheric shower particles. Zhur.eksp.i teor.fiz. 42 no.4: 1061-1062 Ap '62. (MIRA 15:11)

1. Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta.

(Cosmic rays)

45360
S/056/63/044/001/005/067
B108/B180

3.2430

AUTHORS: Babayan, Kh. P., Boyadzhyan, N. G. Grigorov, N. L., Tret'yakova, Ch. A., Shestoperov, V. Ya.

TITLE: Large ionization bursts and the spectrum of the nuclear-active particles on mountains

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 44, no. 1, 1963, 22 - 34

TEXT: There are considerable discrepancies in the experimental values of the power exponent of $W(n)dn = Ac \frac{dn}{n^{\gamma+1}}$ the integral spectrum of the bursts as determined by various investigators. The present authors studied large ionization bursts at an altitude of 3200 m above sea level with an arrangement of 92 ionization chambers covering an overall area of 10 m^2. The results showed that a considerable part of the ionization bursts are caused by nuclear-active particles falling simultaneously on to the measuring apparatus. With a large apparatus the bursts spectrum may be very different from that of the single nuclear-active particles. This is due to the

Card 1/2

incidence of a group of particles ("structurized" bursts) (N. L. Grigorov et al. ZhETF, 33, 5, 1099, 1957). In the apparatus used in this investigation, a γ of 1.38 ± 0.03 was recorded for the simultaneous incidence of particle groups, while that for individual particles was 1.92 ± 0.05. There are 6 figures and 3 tables.

ASSOCIATION: Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta (Institute of Nuclear Physics of Moscow State University)

SUBMITTED: June 27, 1962

Card 2/2

S/056/62/042/004/023/037
B108/B102

Fluctuations in the distribution of ...

ASSOCIATION: Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta (Institute of Nuclear Physics of Moscow State University)

SUBMITTED: October 16, 1961

Card 2/2

35058

P/046/62/007/002/001/003
D256/D302

9,6150 (6160 1482)

AUTHORS: Grigorov, N.L., Tretyakova, Ch.A., Shestoperov, V.J., Babyan, Kh.P., Bayadzhyan, N.G., Buja, Z., Łoskiewicz, J., Massalski, J., and Oleś, A.

TITLE: Integral spectrum of ionization pulses caused by nuclear active particles of cosmic radiation at mountain altitudes

PERIODICAL: Nukleonika, v. 7, no. 2, 1962, 61 - 73

TEXT: The investigation was conducted in order to obtain information concerning: 1) The pulse spectrum and its dependence upon the dimensions of the apparatus, 2) the altitude dependence of the frequency of the registered pulses, 3) the mechanism of local generation of π^0 mesons by nuclear active particles. The apparatus covered an area of 10 m^2 and it consisted of 6 horizontal trays of 33 ionization chambers each, the trays being separated by graphite and lead absorbers, arranged to enable detection of electromagnetic cascades created by the decay products of π^0 mesons and evaluation

Card 1/4

Integral spectrum of ionization ...

of the energy transferred in the interactions up to 2 x 10^{13} ev. The pulses and pulse heights were recorded photographically from screens of 6 cathode-ray oscilloscopes with waiting spot. Using mechanical selectors it was possible to register subsequently individual pulses from all the ionization chambers, each of them being connected to its own amplifier. The experiments were carried out at two altitudes: 200 m (Moscow) and 3200 m above the sea level (the Mountain Station of the Armenian Academy of Sciences at Mount Aragac). Owing to the independent registration in each ionization chamber it was possible to divide the registered pulses into two groups: 1) Single pulses, i.e. events in which the pulse in each tray was registered by a small number of ionization chambers; 2) Structural' pulses defined as events occuring at least in one of the trays 1 to 4, in such a way that the groups of ionization chambers showing pulses were interspaced with one or more chambers without any ionization. The first group of pulses was attributed to nuclear active particles as well as μ mesons, and the second one could be produced only by groups of nuclear active particles falling simultaneously on the apparatus, as it was borne out from the

Card 2/4

Integral spectrum of ionization ...

investigation of the influence of the dimensions of the apparatus used upon the ionization spectra. The dependence of the percentage of the structural pulses upon the registered pulse height was examined, showing that the percentage of the structural pulses is a monotonic function increasing with the increase of the total pulse height registered i.e. with increasing the total energy. In order to assess the role of μ mesons, the altitude dependence was investigated of generating pulses of different nature. The integral spectra were found to be exponential: $N = AI^{-\gamma}$ in the region of pulse heights from 10^3 to 10^5 particles. The following conclusions were derived from the analysis of the experimental results: 1) The spectra induced by nuclear active particles depend essentially on the dimensions of the apparatus and on the pulse heights. The exponent γ of the integral spectrum for pulse heights (measured in numbers of particles) ranging from 2×10^3 to 2×10^5 particles changes from $\gamma = 1.41$ to $\gamma = 2.00$ for the area of the apparatus changing from 330×330 cm^2 to 10×330 cm^2 respectively. 2) At mountain altitudes the exponent γ of the integral spectrum for single nuclear active particles was determined to be $\gamma = 2.01 \pm 0.08$ for $3 \times$

Card 3/4

$10^3 \leq I < 3 \times 10^4$, and for all the nuclear active particles including the structural pulses $\gamma = 1.62 \pm 0.04$. 3) The integral spectrum of the large pulses by u mesons is also of an exponential form with $\gamma = 2.22 \pm 0.14$. 4) At the sea level the contribution of the μ mesons constitutes approx. 70 % of all single pulses with a height $\geq 2 \times 10^3$ particles and 50 % for heights $\geq 2 \times 10^4$ particles. There are 5 figures, 4 tables and 4 Soviet-bloc references.

ASSOCIATION: Institute of Nuclear Physics, University of Moscow; (N.L. Grigorov, Ch.A. Tretyakova, and V.J. Shestoperov); Institute of Nuclear Physics, Armenian Academy of Sciences, Yerevan; (Kh.P. Babayan, and N.G. Bayadzhyan); Institute of Nuclear Research, Polish Academy of Sciences, Cracow; Academy of Mining and Metallurgy, Cracow, II Department of Physics (Z. Buja, J. Łoskiewicz, J. Massalski, and A. Oleś)

SUBMITTED: January, 1962

L 19646-63 EWT(m)/BDS AFFTC/ASD
ACCESSION NR: AP3007056 S/0056/63/045/003/0418/0427

AUTHORS: Babayan, Kh. P.; Boyadzhyan, N. G.; Grigorov, N. L.; Mamadzhanyan, E. A.; Tret'yakova, Ch. A.; Shetoperov, V. Ya.

TITLE: Energy spectrum of nuclear active particles in extensive air showers

SOURCE: Zh. eksper. i teoret. fiziki, v. 45, no. 3, 1963, 418-427

TOPIC TAGS: extensive air shower, nuclear active particle, energy spectrum, ionization burst

ABSTRACT: Ionization bursts produced by nuclear active particles in extensive air showers were studied with an array of 192 ionization chambers with area (10 m^2) small enough to make the burst spectrum coincide with the nuclear-active particle spectrum and large enough to achieve good statistical accuracy. The data obtained indicate that the spectrum of bursts with more than 1000 nuclear-active par-

Card 1/2

L 19646-63
ACCESSION NR: AP3007056

ticles depends greatly on the size of the detecting array. The burst spectrum in the range from 1000 to 10,000 particles in showers with a total of 10^5 to 10^6 particles is characterized by a spectrum exponent 1.8--1.9 when measured with an array area of about one meter, but only approximately 1.0 in the case of an array of 10 m^2, whereas the spectrum exponent of bursts produced by individual particles in the same showers is 1.6 ± 0.1. Orig. art. has 5 figures.

ASSOCIATION: Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta (Nuclear Phys. Inst. Moscow State Univ.); Fizicheskiy institut Akademii nauk Armyanskoy SSR (Physics Inst., Academy of Sciences Armenian SSR)

SUBMITTED: 15Feb63 DATE ACQ: 08Oct63 ENCL: 00

SUB CODE: PH NO REF SOV: 008 OTHER: 002

Card 2/2

increase. The heat resistance should also increase with the concentration of these

L 53693-65

ASSOCIATION: Ural'skiy politekhnicheskiy institut (Ural Polytechnic Institute); NIITYaZhMASH UZTM

SUBMITTED: 30Sep63

TRET'YAKOVA, G.A.

The shoulder pain syndrome. Trudy LIETIN no.16:373-379 '64.
(MIRA 19:1)

1. Pervyy Leningradskiy meditsinskiy institut imeni akademika I.P. Pavlova.

SOKOL'SKIY, D.V., akademik; TRET'YAKOVA, G.F.

Hydrogenation of unsaturated compounds, while maintaining a constant concentration in the solution. Dokl.AN SSSR 138 no.2:399-401 My '61. (MIRA 14:5)

1. Kazakhskiy gosudarstvennyy universitet im. S.M.Kirova.
2. Akademiya nauk KazSSR (for Sokol'skiy).
(Unsaturated compounds) (Hydrogenation)

SOKOL'SKIY, D.V., akademik; TRET'YAKOVA, G.F.

Hydrogenation of unsaturated compounds in equilibrium on platinum group catalysts. Dokl. AN SSSR 140 no.4:844-846 O '61. (MIRA 14:9)

1. AN Kazanskoy SSR (for Sokol'skiy).
(Unsaturated compounds) (Hydrogenation) (Platinum)

TRET'YAKOVA, G. I., Cand Biol Sci (diss) -- "Aspects of the development of the causative agent of apple scab (Venturia inaequalis aderh.) and the development of ways to suppress this disease under the conditions of the Stavropol' plateau". Stavropol', 1960. 16 pp (Stavropol' Agric Inst, Chair of Plant Protection), 120 copies (KL, No 14, 1960,131)

IL'INITSKIY, L.V.; TRET'YAKOVA, G.I., kand. biolog. nauk; KHADZHINOV, N.I.; BABAYEV, T.A., kand. biolog. nauk; BAGIROV, M.M., mladshiy nauchnyy sotrudnik

Brief information. Zashch. rast. ot vred. i bol. 9 no.5:56 '64. (MIRA 17:6)

1. Berezovskiy fito-entomologicheskiy sortouchastok, Odesskaya obl. (for Il'initskiy). 2. Stavropol'skiy sel'skokhozyaystvennyy institut (for Tret'yakova, Khadzhinov). 3. Laboratoriya immuniteta Azerbaydzhanskogo instituta zashchity rasteniy, Kirovabad (for Babayev, Bagirov).

TRET'YAKOVA,G.I., kand. biol. nauk

[Chemical means for protecting plants from pests and diseases] Khimicheskie sredstva zashchity rastenii ot vreditelei i boleznei. Stavropol', Stavropol'skoe knizhnoe izd-vo, 1964. 22 p. (MIRA 18:8)

1. SAVINOV, V. G.; TRET'YAKOVA, G. S.

2. USSR (600)

4. Vitamins

7. Bromination of carotene with N-bromosuccinimide. Ukr. khim. zhur. 17, No. 4, 1951.

9. Monthly List of Russian Accessions, Library of Congress, April 1953. Unclassified.

TRET'YAKOVA, G. S.

Chem Abs
V. 48 25 Jan 54

Organic Chem

Synthesis of compounds possessing vitamin A activity. B. G. Savinov and G. S. TreCyakova. *Uspekhi Khim.* 20, 330–50(1951).—Review with 76 references. G. M. K.

GTRSPL—Vol. 5-No. 1 Jan. 1952

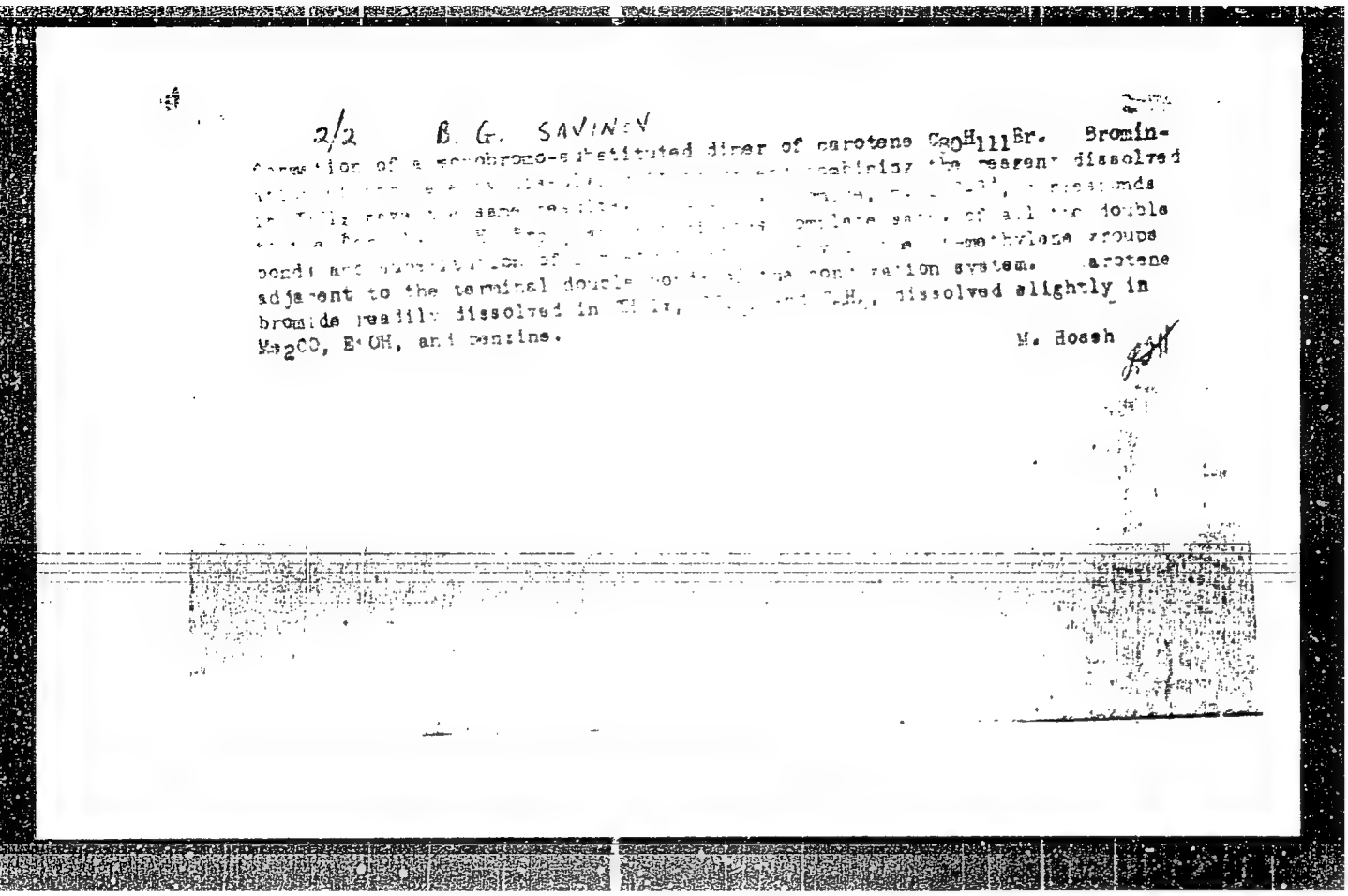
Savinov, B.G. and Tret'yakova, G.S. (Institute of Organic Chemistry, Ukrainian S.S.R. Academy of Sciences). Dimerization of carotin in bromination, 553-5

Akademiya Nauk, S.S.S R., Doklady Vol. 78, No. 3, 1951

USSR.

Halogen derivatives of carotene. [illegible] G. Savinov and [illegible] S. [illegible]. Vitaminy Akad. Nauk Ukr. S.S.R. 1, [illegible] ([illegible]); Referat. Zhur., Khim. 1954, No. 10613. -
Carotene (95% pure) was iodinated [illegible] by stirring with iodine for 10 min., and recrystg. from [illegible]. At a ratio for carotene-iodine mixt. of 1:1-1:6 the product contained 45.49.50.[illegible] iodine which indicates a mixt. of substances. The melting temps. of the iodination product (I) varied from 13[illegible] to 1[illegible] (decompn.). Further study of I was done chromatographically using [illegible] adsorbents. [illegible] was proved to be anhyd. activated [illegible]. The [illegible] zone of the [illegible] retained the basic I was [illegible] [illegible] completely. It was recovered by dissolving the adsorbent in water. [illegible] was extractable by $CHCl_3$ and pptd. by benzine. [illegible] a black powder with metallic sheen, [illegible] (decomp.). [illegible] [illegible] The iodine is [illegible] [illegible] and 1.2 moles [illegible] the [illegible] [illegible] and [illegible] the [illegible]

(OVER)



2/2 B. G. SAVINOV

Formation of a monobromo-substituted dimer of carotene $C_{80}H_{111}Br$. Bromin- [illegible] combining the reagent dissolved [illegible] same reaction [illegible] complete series of all the double [illegible] bonds and [illegible] of a conjugation system. Carotene adjacent to the terminal double [illegible] and C_6H_6, dissolved slightly in bromide readily dissolved in [illegible], Me_2CO, EtOH, and benzine.

M. Dosch

USSR.

Production of azotol-A from a mixed anhydride of silicic and 2,3-hydroxynaphthoic acids. A. V. Kirsanov, E. S. [illegible]chenko, and G. S. Tret'yakov. *Ukrain. Khim. Zhur.* 19, [illegible] 7(1953); *Referat. Zhur., Khim.* 1954, No. [illegible]410.—The possibility of replacing PCl_3 by $SiCl_4$ in the synthesis of 2-hydroxy-3-naphthoic acid anilide (azotol A) (I) is shown. When $SiCl_4$ reacts with 2-hydroxy-3-naphthoic acid (II) HCl is liberated and there forms an amorphous "yellow substance" (III) corresponding to the formula [illegible], which is apparently a mixed anhydride of II and silicic acid. By the action of aniline on III is formed I. In the presence of excess $SiCl_4$ and large excess of aniline besides I also forms 2-hydroxy-3-naphthoic acid diphenylamidine (IV). I obtained with the aid of $SiCl_4$ contains SiO_2 and needs to be purified by reptn. from alkali. A mixt. of 1 mole of II, a solvent (PhCl, C_6H_6, CCl_4, or ether), and from 0.6 to 1.2 moles $SiCl_4$ is heated at 40–60° until evolution of HCl stops and then for 20 min. more at 100°. Pptd. III is washed with C_6H_6 and dried *in vacuo*. The yield is quantitative. Boiling III with MeOH or EtOH gives the corresponding esters of II with yields of 68 and 51%, resp. To III obtained from 0.01 mole II and 0.012 mole $SiCl_4$ in C_6H_6 is added 0.11 mole aniline, and the mixt. is heated for 3 hrs. at 160°. After cooling, the product is treated with HCl and Na_2CO_3 soln. The product, I, is repptd. from alkali, yield 82%, and contains 10.7% SiO_2. To obtain I without sepn. of III, 0.06 mole of II, 30 ml. PhCl, and 0.034 mole $SiCl_4$ is heated for 30 min. at 50–60°, and then 30 min. at 100°. Then is added 0.36 mole aniline, the mixt. heated for 4 hrs. at 170°, neutralized with a soln. of Na_2CO_3, and the solvent is driven off with steam. Pptd. I is repptd. from *N* NaOH, yield 87%, and SiO_2 content 1%. Replacing C_6H_6 with C_7H_8 gives a yield of 67%. At molar ratios II-$SiCl_4$-$PhNH_2$ = 1:1.15:3.1, the yield of I drops to 42–0%, and the yield of IV increases to 25–34%.

M. Hosch

KIRSANOV, A.V.; LEVCHENKO, Ye.S.; TRET'YAKOVA, G.S.

Diphenylamidination of carboxylic acids. Ukr.khim.zhur. 19 no.6:622-630 '53. (MLRA 8:5)

1. Institut organicheskoy khimii Akademii nauk USSR
(Amidines) (Acids, Fatty)

GOLOVIN, P.V.; ABRAMOVA, M.A.; SHAPOSHNIKOVA, Z.B.; GERASIMENKO, A.A.; DENISOVA, Ye. V.; TRET'YAKOVA, G.S.

Regeneration of ion exchangers. Sakh.prom. 35 no.6:13-16 Je '61. (MIRA 14:6)

1. Institut organicheskoy khimii AN USSR.
(Sugar manufacture) (Ion exchange)

GOLOVIN, P.V.; GERASIMENKO, A.A.; TRET'YAKOVA, G.S.

Precipitation of saccharose from solutions of molasses in a form of calcium trisaccharate. Sakh.prom. 34 no.10:29-30 O '60.
(MIRA 13:10)

1. AN USSR.
(Sucrose) (Molasses)

GOLOVIN, Pavel Vasil'yevich; GERASIMENKO, Aleksey Antonovich; TRET'YAKOVA, Galina Sergeyevna; ROMINSKIY, I.R., doktor tekhn.nauk, otv.red.; POKROVSKAYA, Z.S., red.izd-va; MATVEYCHUK, A.A., tekhn.red.

[Saccharates and their use in industry] Sakharaty i ikh primenenie v promyshlennosti. Kiev, Izd-vo Akad.nauk USSR, 1960. 234 p. (MIRA 14:4)

(Sucrose)

5.2200,5.1310

75670
SOV/80-32-10-19/51

AUTHORS: Maytak, G. P., Tret'yakova, G. S.

TITLE: Some Physical, Chemical, and Technical Characteristics of Electrolytes for Steel Electropolishing

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol 32, Nr 10, pp 2242-2247 (USSR)

ABSTRACT: In their previous study (this journal, 1959, Vol 32, Nr 5, p 1060) the authors described new electrolytes for steel-polishing, consisting of sulfuric and phosphoric acid mixtures with "unicol" corrosion inhibitor, suggested by Balezin, Barannik, and Putilova in their study, "Application of Acid Corrosion Inhibitors" (Primeneniye ingibitorov kislotnoy k[illegible]), Goskhimizdat, Moscow-Leningrad, 1948. The present study deals with the length of the service period, the density, viscosity, electrical conductivity, and other characteristics of this electrolyte as well as with the changes in these characteristics during the electropolishing process, and compares it with the sulfophosphochromium electrolytes (called from here

Card 1/4

Some Physical, Chemical, and Technical Characteristics of Electrolytes for Steel Electropolishing

75670
SOV/80-32-10-19/51

on in this abstract "SPC electrolytes"). The experiments were conducted with ShKh-15 high-carbon steel anodes (Ukr. khim. zh., 1959, Vol 25, p 385) in an electrolyte of the following composition (in weight %): H_3PO_4 35%; H_2SO_4 50%; water 15%; and 2.5 volumetric % of MN-10 type "unicol" inhibitor; the current density varied from 1 to 100 amp/dm^2; the temperature was from 18 to 25°; no separating diaphragm was used between the cathode and anode, and the electrolyte composition was not corrected during the experiment. It was determined that the service period of the investigated electrolyte was considerably longer than that of SPC electrolyte. This was due to the separation of the electrolyte from the precipitate after the passage of about 600 amp hr/liter and a resultant correction of the electrolyte composition, which restored its electropolishing properties. The density, viscosity, and electrical conductivity of the freshly prepared electrolyte were practically identical with that of the SPC

Card 2/4

Some Physical, Chemical, and Technical Characteristics of Electrolytes for Steel Electropolishing

75670
SOV/80-32-10-19/51

electrolyte; during the process of electropolishing, however, the changes in the above characteristics were less pronounced and different from those of the SPC electrolyte. The density and viscosity first increased, then decreased, and the electrical conductivity increased in a continuous manner. The yield based on current (in %) first dropped sharply with increasing current density, then decreased slowly; it increased somewhat at high current density values. The decrease in the yield in the course of the process was much slower than in the process conducted with SPC electrolyte. At a current density of 75 to 100 amp/dm^2 (at which the electropolishing takes place) the yield based on current decreased insignificantly and practically in a linear manner. The lower rate of the steel's dissolution was due, evidently, to the lower operational temperature than with SPC electrolyte, and to the preserving effect of the inhibitor. There are 4 figures; and 9 Soviet references.

Card 3/4

Some Physical, Chemical, and Technical Characteristics of Electrolytes for Steel Electropolishing

75670
SOV/80-32-10-19/51

ASSOCIATION: Institute of General and Inorganic Chemistry, Academy of Sciences, Ukr SSR (Institut obshchey i neorganicheskoy khimii AN USSR)

SUBMITTED: October 6, 1958

Card 4/4

Some Physical, Chemical, and Technical Characteristics of Electrolytes for Steel Electropolishing

75670
SOV/80-32-10-19/51

ASSOCIATION: Institute of General and Inorganic Chemistry, Academy of Sciences, Ukr SSR (Institut obshchey i neorganicheskoy khimii AN USSR)

SUBMITTED: October 6, 1958

Card 4/4

5(4) SOV/80-32-5-23/52

AUTHORS: Maytak, G.P., Tret'yakova, G.S.

TITLE: Electrolytes for the Electrochemical Polishing of Steel

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol 32, Nr 5, pp 1060-1065 (USSR)

ABSTRACT: Sulfuric-phosphoric-chromic electrolytes are used in the polishing of steel. They contain, however, the expensive and deficient orthophosphoric acid. In the article electrolytes with the inhibitor unikol MN-10, which was proposed by Balezin, Barsonnik and Putilova [Ref 7] are investigated. This inhibitor was used in the quantity of 2.5%. The temperature was 18-25°C, the current density 10, 25, 50, 75 and 100 A/dm^2. The optimum electrolyte for high-carbon steel has a composition of 30-75 weight % H_3PO_4, 10-50 weight % H_2SO_4, 10-15 weight % H_2O and 2.5 volume % of unikol. The optimum current density increases with the water content. The dilution of the electrolyte in which the ratio of the acids does not change, confirms this fact. If the water content increases from 15 to 19%, the optimum current density rises from 50 to 75 A/dm^2. To keep current consumption low, the electrolyte should have 60-70% phosphoric acid and 10-15% of water. Electropolishing in hot electrolytes produces a tarnish which

Card 1/2

is avoided by stirring the electrolyte. Since stirring diminishes the shine, it is r ecommended to use it intermittently or only in the beginning of the treatment. Stainless steel, like type 1Kh18N9T, may be polished by the same electrolyte. The current density for them is lower than for high-carbon steel. At present the inhibitor unikol PB-5, a condensation product of aniline and urotropine [Ref 8] is being developed. There are: 2 tables, 1 graph and 8 references, 7 of which are Soviet and 1 English.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN UkrSSR (Institute of General and Inorganic Chemistry of the AS UkrSSR)

SUBMITTED: October 10, 1957

SAVINOV, B.G., TRET'YAKOVA, G.S.

Studying certain halogen derivatives of the provitamin A, carotene.
Vitaminy no.1:137-148 '53 (MIRA 11:6)

1. Institut organicheskoy khimii AN USSR, Kiyev.
(CAROTNE)
(HALOGEN COMPOUNDS)

PROCESSES AND PROPERTIES INDEX

CA

12

Acidproof lutes and concretes. B. G. Peretz and F. N. Tretyakova. *Trans. VI Mendeleev Congr.* 1932 2, 1, 2[illegible]-313(1935). In the course of the investigations some requirements that should be put to artificial acidproof masses were formulated as follows: a sufficient adhesivity, relations of adhesive power, mechanical strength, solv. in acids, impermeability to acids and changes of vol. of artificial acidproof masses to the different kinds of raw materials used was investigated in detail (the materials considered are andesite, quartz, quartzite, feldspar, sand, diatomite, slag, sol. glass, NH_4Cl, Na_2SiF_6, acids, CaO, MgO, etc.). Caucasian andesite cannot be completely substituted by quartz. E. E. Stefanowsky

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

Bromination of carotene by N-bromosuccinimide. II.

SAVINOV, B.G.; TRET'YAKOVA, G.S.

Polymerization of carotene during bromization. Doklady Akad. nauk SSSR 78 no.3:553-555 21 May 1951. (CLML 20:9)

1. Institute of Organic Chemistry of the Academy of Sciences Ukrainian SSR. 2. Presented by Academician A.I. Oparin 30 March 1951.

TRET'YAKOVA, I.V., inzh.; NOVOGRENKO, G.U., inzh.; KHOPOVA, M.P., inzh.

Effect of the temperature of ambient air on the heating of short-circuited AM, MA140, and MAF-series induction motors.
Elektrotekhnika 36 no.2:41-43 F '65.
(MIRA 18:4)

BERLOVSKIY, V.M., inzh.; SHUMPA, Ye.P., inzh.; IRET'YAKOVA, I.V., inzh.; MINEVICH, A.B., inzh.

Generator-motor unit with parallel power transmission for mine hoisting systems. Elektrotekhnika 36 no.6:29-32 Je '65. (MIRA 18:7)

TRETYAKOVA, K.A.

Incorporation of C14-acetate into cholesterol and fatty acids of the liver in adrenalectomized irradiated rats. Biul. eksp. biol. i med. 57 no.6:47-49 Je '64. (MIRA 17:8)

1. Radiatsionnaya laboratoriya (zav. - D.F.Grodzenskiy) Vsesoyuznogo instituta eksperimental'noy endokrinologii (dir. - prof. Ye.I. Vasyukova), Moskva.

TRET'YAKOVA, K.A.

Seasonal variations in the cholesterol content of the adrenal glands in rats. Biul. eksp. biol. i med. 59 no.6:(2-4. Je '65.
(MIRA 18:6)

1. Radiatsionnaya laboratoriya (zav. D.E. Grodzenskiy) Vsesoyuznogo instituta eksperimental'noy endokrinologii (dir. - prof. Ye.A. Vanyukova), Moskva.

TRET'YAKOVA, K.A. (Moskva)

Cholesterol synthesis in an animal organism and its control.
Usp. sovr. biol. 57 no.3:350-369 My-Je '64. (MIRA 17:6)

TRET'YAKOVA, K.A.; GRODZENSKIY, D.E.

Effect of thyroiodine and thyroidectomy on the rate of synthesis of cholesterol and fatty acids in rats under the influence of radiation. Vop. med. khim. 6 no. 6:611-614 N-D '60. (MIRA 14:4)

1. Radiation Laboratory of the All-Union Institute of Experimental Endocrinology, Moscow.
(THYROID GLAND) (CHOLESTEROL) (FATTY ACIDS)
(RADIATION SICKNESS)

TRET'YAKOVA, K.A.; GRODZENSKIY, D.E.

The rate of cholesterol and fatty acid synthesis in the adrenals, testes, and liver of young and old rats under normal conditions after irradiation. Biokhimiia 25 no. 3:399-403 My-Je '60. (MIRA 14:4)

1. Radiatsionnaya laboratoriya Vsesoyuznogo instituta eksperimental'noy endokrinologii, Moskva.
(CHOLESTEROL METABOLISM) (FATTY ACID METABOLISM) (AGING) (RADIATION—PHYSIOLOGICAL EFFECT)

TRETYAKOVA, K. A., GRODZENSKIY, D. E., (USSR)

"Effect of Hormonal Factors on the Rate of Synthesis of Cholesterol in Normal and Irradiated Rats."

Report presented at the 5th Int'l. Biochemistry Congress, Moscow, 10-16 Aug 1961.

41722

S/218/62/027/005/001/001
B144/B186

27.1220
27.1100

AUTHOR: Tret'yakova, K. A.

TITLE: On the role of the pituitary in radiation-induced acceleration of cholesterol synthesis

PERIODICAL: Biokhimiya, v. 27, no. 5, 1962, 801 - 804

TEXT: In order to explain the contradictions in published data the rate of cholesterol synthesis was studied in irradiated white rats after hypophysectomy or blocking of the pituitary. Altogether 79 rats were examined, 30 of them as controls and 6 of them only whole-body irradiated with an x-ray dose of 800 r. Conditions of the three experimental series: (I) hypophysectomy; (II) hypophysectomy and irradiation; (III) blocking of the pituitary by administering 20 mg of DOCA per 100 g of body weight and irradiation after 24 hrs. 24 hrs after the irradiation $CH_3C^{14}OOH$ was administered subcutaneously, 4 hrs later the animals were killed and the radioactivity of cholesterol C^{14} was determined in the liver and in the supravenal glands (Vopr. med. khimii 5, 362, 1959). The animals used in tests I and III were starved for 24 hrs and those used in test II for 4 hrs,

Card 1/2

before they were killed. Results: hypophysectomy caused after 4 - 5 days a strong reduction of cholesterol synthesis in the liver. The retarding effect of the chemical blocking became weaker. Irradiation caused a strongly accelerating effect, which was weaker but still significant if preceded by DOCA blocking. In hypophysectomized animals no statistically significant difference was observed between irradiated and non-irradiated animals; the divergences in the published data and the variability of the data from the present experiments may probably be ascribed to differences in the postoperative diet of the rats. The usual radiation-induced reaction of the supravenal glands, i.e., reduction of the cholesterol content and acceleration of cholesterol synthesis, was not observed in hypophysectomized animals. There are 2 figures and 1 table.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut eksperimental'noy endokrinologii (All-Union Scientific Research Institute of Experimental Endocrinology), Moscow

SUBMITTED: December 16, 1961

TRET'YAKOVA, K. A

TRET'YAKOVA, K.A. (Moskva)

Cholesterol and ascorbic acid content of the adrenal glands in dogs following ionizing irradiation [with summary in English, p.126] Probl.endok. i gorm. 3 no.3:72-74 My-Je '57. (MIRA 10:10)

1. Iz Vsesoyuznogo instituta eksperimental'noy endokrinologii (dir. - prof. Ye.A.Vasyukova)

(ROENTGEN RAYS, effects,
on adrenal cortex cholesterol & vitamin C (Rus))
(ADRENAL CORTEX, metabolism,
cholesterol & vitamin C, eff. of x-rays (Rus))
(CHOLESTEROL, metabolism,
adrenal cortex, eff. of x-rays (Rus))
(VITAMIN C, metabolism,
same)

TRET'YAKOVA, K. A., TRODZENSKIY, D. E.

"The Rate of Synthesis of Cholesterol and Fatty Acids in the Suprarenal Glands, Testicles and Liver of Young and Old Rats Normally and After Irradiation."

Theses of the Proceedings of the Annual Scientific Sessions 23-26 March 1959 (All-Union Institute of Experimental Endocrinology)

From the Radiation Laboratory (Head--Docent D. E. Grodzenskiy of the All-Union Institute of Experimental Endocrinology (Director--Professor Ye. A. Vasyukova)

TRET'YAKOVA, K.A.; GRODZENSKIY, D.E.

Biosynthesis of cholesterol and fatty acids in the liver and adrenals of rats exposed to the effect of ionizing radiations. Vop.med.khim. 5 no.5:362-366 S-O '59. (MIRA 13:2)

1. Radiation Laboratory, the All-Union Institute for Experimental Endocrinology, Moscow.
(CHOLESTEROL metab.)
(FATTY ACIDS metab.)
(ADRENAL GLANDS radiation eff.)
(LIVER radiation eff.)

TRET'YAKOVA, K. I.

PHASE I BOOK EXPLOITATION SOV/4984

International symposium on macromolecular chemistry. Moscow, 1960.

Mezhdunarodnyy simpozium po makromolekulyarnoy khimii SSSR, Moskva, 14-18 iyunya 1960 g.; doklady i avtoreferaty. Sektsiya III. (International Symposium on Macromolecular Chemistry Held in Moscow, June 14-18, 1960; Papers and Summaries) Section III. [Moscow, Izd-vo AN SSSR, 1960] 469 p. 55,000 copies printed.

Tech. Ed.: P. S. Kashina.

Sponsoring Agency: The International Union of Pure and Applied Chemistry. Commission on Macromolecular Chemistry.

PURPOSE: This book is intended for chemists interested in polymerization reactions and the synthesis of high molecular compounds.

COVERAGE: This is Section III of a multivolume work containing papers on macromolecular chemistry. The articles in general deal with the kinetics of polymerization reactions, the synthesis of special-purpose polymers, e.g., ion exchange resins, semiconductor materials, etc., methods of catalyzing polymerization reactions, properties and chemical interactions of high molecular materials, and the effects of various factors on polymerization and the degradation of high molecular compounds. No personalities are mentioned. References given follow the articles.

MIRSKOVA, V.N.; VOYUTSKAYA, M.I.; STARKOVA, G.A.; TARASOVA, N.I.; TRET'YAKOVA, K.I.; RAYKHER, I.I.

Study of antitoxin losses in the purification and concentration of sera by the diapherm-3 method. Zhur.mikrobiol.epid.i immun. 31 no.8:139-141 Ag '60. (MIRA 14:6)

1. Iz Permskogo instituta vaktsin i syvorotok.
(SERUM)

MIRSKOVA, V.N.; STARKOVA, G.A.; VOYUTSKAYA, M.I.; TARASOVA, N.I.; TRET'YAKOVA, K.S.

Use of a reduced dose of pepsin in the purification and concentration of sera by means of the Diaferm-3 method. Zhur. mikrobiol. epid i immun. 31 no.6:116 Je '60. (MIRA 13:8)

1. Iz Permskogo instituta vaktsin i syvorotok.
(PEPSIN) (SERUM)

VERNER, A.R.; TRET'YAKOVA, K.Ye.

Conditions of preservation and viability of corn, strawberry, and apple pollen. Trudy TSSBS no.5:89-97 '61. (MIRA 15:3)
(Pollen)

LESHCHINSKIY, L.A.; TRET'YAKOVA, L.A. (Izhevsk)

Result of combined (interavenous and intramuscular) penicillin administration in pneumonia therapy. Klin.med. 36 no.3:45-48 Mr '58. (MIRA 11:4)

(PNEUMONIA, ther.
penicillin, combined intravenous & intramusc. admin. (Rus))
(PENICILLIN, ther. use
pneumonia, combined intravenous & intramusc. admin. (Rus))

KOZYREV, A.; TRET'YAKOVA, L.; PEREVERTUN, A.I.

Improving the method of metallometric analysis for mercury. Sbor. nauch. trud. Kaz GMI no.19:199-201 '60. (MIRA 15:3)
(Mercury)

ACC NR AP6035692 (A,N) SOURCE CODE: UR/0413/66/000/019/0034/0034

INVENTOR: Kost, A. N.; Tret'yakova, L. G.

ORG: none

TITLE: Preparation of substituted 4-hydroxyindoles. Class 12, No. 186485 [announced by Chemistry Department, Moscow State University im. M. V. Lomonsov (Khimicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 19, 1966, 34

TOPIC TAGS: hydroxyindole, substituted hydroxyindole, dehydrogenation, diethylene glycol

ABSTRACT: To broaden the raw material base for the preparation of 4-hydroxyindoles, unsubstituted or 2,3-substituted 4-keto-4,5,6,7-tetrahydroindoles are dehydrogenated in the presence of palladium black-on-carbon in diethyleneglycol, in a CO_2 atmosphere.

[WA-50; CBE No. 14]
[PS]

SUB CODE: 07/ SUBM DATE: 29Sep65

Card 1/1 UDC: 547.755.07

NESTEROV, V.F.; TRET'YAKOVA, L.I., kand. tekhn. nauk

Improvement of hauling operations in the garment cutting department. V.F. Nesterov, L.I. Tret'iakova. Leh. prom. no.2: 47-49 Ap-Je'64 (MIRA 17:7)

TRET'YAKOVA, L.I.

Investigating the heat insulating properties of clothing. Leh. prom. no.3:83-84 Jl-S '63. (MIRA 16:11)

TRET'YAKOVA, L.I., inzh.

Studying heat-insulating properties of wadding pads. Izv. vys. ucheb.zav.; tekh.leg. prom. no.1:129-137 '58. (MIRA 11:6)

1.Moskovskiy tekhnologicheskiy institut legkoy promyshlennosti.
(Clothing, Cold weather)

TRET'YAKOVA, L.I., kand. tekhn. nauk

Methods and devices for measuring the heat insulating properties of fabrics for clothing. Leh. prom. no.3:14-18 Jl-S '65.
(MIRA 18:9)

TRET'YAKOVA, L.I.

TRET'YAKOVA, L.I.; LYAPIN, Ye.N.

Minutes of the 17th and 18th sessions of the Leningrad and Leningrad Province Society of Oncologists. Vop.onk. 3 no.4:508-512 '57.
(TUMORS) (MIRA 10:11)

TRET'YAKOVA, L.I., assistant

Eliminate the difficulties encounted in studying. Shvein.prom. no.6:39 N-D '59. (MIRA 13:4)

1. Kafedra shveynogo proizvodstva Kiyevskogo tekhnologicheskogo instituta legkoy promyshlennosti.
(Clothing industry--Study and teaching)

TRET'YAKOVA, L. I.

AUTHORS: Ignatov, Yu.V., and Tret'yakova, L.I. 28-4-10/35

TITLE: Determination of the Warmth-Insulating Properties of Clothing Material (Opredeleniye teplozashchitnykh svoystv odezhnykh materialov)

PERIODICAL: Standartisatsiya, 1957, # 4, July-August, pp 39-42 (USSR)

ABSTRACT: The article considers the theory of heat exchange through clothing and means of measuring this heat.

The authors criticize the standard device - ГОСТ 6068-51- which is based on a stationary flow of heat (clothing in contact with the skin on one side and with a rigid stationary object on the other, as in sitting or leaning). According to the Research Institute for Wool and other organizations, the accuracy of this device is about 10%.

Widest used are the measuring devices based on the theory of normal conditions, developed by Professor G.M. Kondrat'yev. The bicalorimeter (Fig. 2) is based on this principle. The average accuracy of measured cooling is, with the use of this device, 2-3%; the duration of a test is 12-20 min. The bicalorimeter enables not only the measurement of the thermal resistance value of various materials but also the changes of these properties with changes of the physical and mechanical factors.

Card 1/3

Determination of the Warmth-Insulating Properties of Clothing Material

An investigation of cotton-wool linings enabled the determination of a linear relation between the total thermal resistance and the weight of linings (Fig. 3). A chart is given that shows the total thermal resistance of some animal pelts, nylon fur, cotton and wool materials. The simplicity and convenience of the bicalorimeter have been noted by individual investigators and by institutes, such as S.G. Zyrin, N. Ye. Nikiforova, D.A. Mendel'son, of the Leningrad institutes of Precision Mechanics and Optics, of Work Hygiene and Occupational Diseases, and others. Extensive use of this instrument in the research laboratories is, however, handicapped by the absence of a standard.

The authors say in conclusion that this standard would be best developed by the laboratory of Professor G.M. Kondrat'yev at the Leningrad Institute for Precision Mechanics and Optics.

Card 2/3

There is 1 drawing, 3 graphs and 1 table.